

What is claimed is:

1. A method of ordering data writes, comprising:

at least some of a group of primary storage devices receiving a first plurality of data writes;

5 causing a cycle switch for the group of primary storage devices wherein the first plurality of data writes are associated with a particular cycle on each primary storage device in the group; and

at least some of the group of primary storage devices receiving a second plurality of writes after initiating the cycle switch wherein all of the second plurality of writes are  
10 associated with a cycle different from the particular cycle on each primary storage device.

2. A method, according to claim 1, wherein writes to the group begun after initiating the cycle switch do not complete until after the cycle switch has completed.

3. A method, according to claim 1, further comprising:

after completion of the cycle switch, each of the primary storage devices of the  
15 group initiating transfer of the first plurality of writes to a corresponding secondary storage device.

4. A method, according to claim 3, further comprising:

following each of the primary storage devices of the group completing transfer of the first plurality of writes to a corresponding secondary storage device, each of the primary storage devices sending a message to the corresponding secondary storage device.

5. A method, according to claim 1, further comprising:

providing the first plurality of data writes to cache slots of the group of primary storage device.

6. A method, according to claim 1, wherein receiving a first plurality of data writes

includes receiving a plurality of data writes from a host.

7. A method, according to claim 1, wherein a host causes the cycle switch.

8. A method, according to claim 1, wherein causing the cycle switch includes:

waiting a predetermined amount of time;

determining if all of the primary storage devices of the group of storage devices is

ready to switch; and

for each of the primary storage devices of the group, sending a first command thereto to cause a cycle switch.

9. A method, according to claim 8, wherein sending a command to cause a cycle switch also causes writes begun after the first command to not complete until a second command is received.

10. A method, according to claim 9, further comprising:

5           after sending the first command to all of the primary storage devices of the group, sending the second command to all of the primary storage devices to allow writes to complete.

11. Computer software that orders data writes to a group of primary storage devices, comprising:

10           executable code that causes a cycle switch for the group of primary storage devices wherein the first plurality of data writes are associated with a particular cycle on each primary storage device in the group; and

            executable code that, for a second plurality of writes provided after initiating the cycle switch, associates all of the second plurality of writes with a cycle different from  
15   the particular cycle on each primary storage device.

12. Computer software, according to claim 11, wherein writes to the group begun after initiating the cycle switch do not complete until after the cycle switch has completed.

13. Computer software, according to claim 11, further comprising:

executable code that causes each of the primary storage devices of the group to initiate transfer of the first plurality of writes to a corresponding secondary storage device after completion of the cycle switch.

5 14. Computer software, according to claim 13, further comprising:

executable code that causes each of the primary storage devices to send a message to the corresponding secondary storage device following each of the primary storage devices of the group completing transfer of the first plurality of writes to a corresponding secondary storage device.

10 15. Computer software, according to claim 11, further comprising:

executable code that provides the first plurality of data writes to cache slots of the group of primary storage device.

16. Computer software, according to claim 11, wherein the first plurality of data writes are from a host.

15 17. Computer software, according to claim 11, wherein a host runs executable code that causes the cycle switch.

18. Computer software, according to claim 11, wherein executable code that causes the cycle switch includes:

executable code that waits a predetermined amount of time;

5        executable code that determines if all of the primary storage devices of the group of storage devices is ready to switch; and

executable code that sends a first command to each of the primary storage devices of the group to cause a cycle switch.

19. Computer software, according to claim 18, wherein executable code that sends a command to cause a cycle switch also causes writes begun after the first command to not  
10        complete until a second command is received.

20. Computer software, according to claim 19, further comprising:

executable code that sends the second command to all of the primary storage devices to allow writes to complete after sending the first command to all of the primary storage devices of the group.

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